

Inserted *Clematis orientalis* into key, based on naturalized populations seen near John Day Dam on Columbia River, where it forms large stands on basalt talus and inaccessible cliffs.

Restructured key, it is now artificial not synoptic, based on leaf architecture and function.

Added habitat data to *Clematis occidentalis* vars. and *C. columbiana* vars., based on specimen data and flora of Montana, eflora of BC.

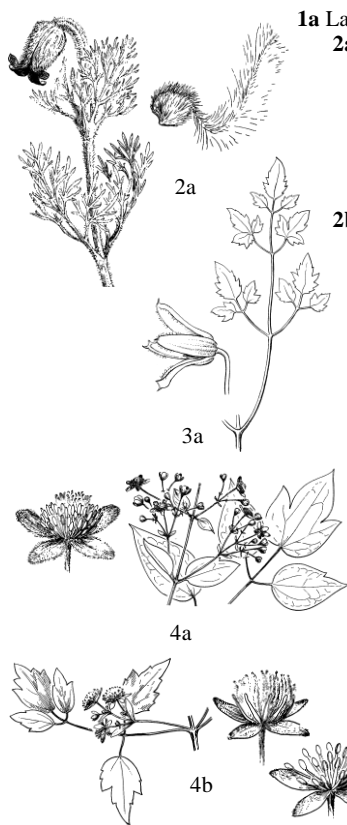
Inserted *Clematis tangutica* var. *tangutica* into the genus description as a note, based on half a dozen recent records from BC in our range. BC records include the note "an exotic which is increasingly being observed, and reported to Regional Invasive Species personnel, in road edge habitat in the Columbia Valley."

**References:**

Grey-Wilson, C. 1989. *Clematis orientalis* (Ranunculaceae) and its allies. Kew Bulletin 44: 33–60.  
 Moreno, N. P. and F. Essig. 1997. *Clematis* Linnaeus subg. *Clematis*. Pp. 159–164, In: Flora of North America Editorial Committee, eds. 1997. Flora of North America North of Mexico. Volume 3, Magnoliidae and Hamamelidae. Oxford University Press, New York. 590 pp.  
 Nelson, A. and J. F. Macbride. 1913. Western plant studies. I. Botanical Gazette 55: 372-383. (Bot. Gaz.) [describes *Clematis aurea* sp nov, holotype RM, but the material turns out to be an introduction of *C. orientalis*, from Challis, Custer Co., ID]  
 Wang, W. and B. Bartholomew. 2001. *Clematis* Linnaeus. Flora of China 6: 333–386.

**Clematis L.** Virgins-bower; Clematis

Pls ♀-fld or ♂, ♀; fls radially symmetrical, mostly showy, apert, single to pan on axillary or terminal peduncles; sepals 4–5(–8), spreading to erect, occ ± connivent, white to yellow, pink, red, blue, or purple; stamens ∞, outer ones occ sterile and ± petaloid; carpels ∞, gen pubescent or villous; ovaries 1-ovuled, style long, plumose, persistent; fr achenes; woody vines or herbaceous per (gen woody-based) with opp (ours) or whorled, 1–several × ternate or pinnate (simple) lvs. (Gr *clema*, pl shoot, an ancient name of a vine). Asian orn *C. tangutica* (Maxim.) Korsh. var. *tangutica*, with bright yellow attenuated sepals glab on inner surface, coll as escape in s BC.



- 1a** Larger lvs pinnately compound; lflets simple, lobed, ternately or pinnately divided
- 2a** Sts erect, not viny, woody only at base; lvs gen 2–4 × divided, segms ∞, slender, linear to narrowly lanceolate or narrowly elliptic, entire, ± glab to densely hairy, not glaucous; fls purple to dark purple (pink or white), nodding; sepals glab on inner surface; anthers hairy; dry, rocky slopes, grassl, seasonally wet meadows, sagebr des, open for; extreme e WA and e OR, e to MT and WY, s in RM to AZ and NM; Douglas’s c., leatherfl, vasefl, sugarbowls; ours var. **1 C. hirsutissima** Pursh
- 2b** Sts climbing, woody vines; lvs 1(–2) × divided, segms gen broad, lflets (3–)5–7(–15), occ ternately lobed or divided, glab or sparsely hairy, entire to coarsely toothed, glaucous or not; lf rachis often twining; fls white or yellow, erect, turned to one side, or nodding; sepals hairy on inner surface; anthers glab to sparsely hairy
- 3a** Sepals pale yellow to greenish-yellow, 15–28 mm, subterminal awns 1-4 mm; stigmas yellow to yellow-green; fls turned to one side or nodding, solitary or occ 3–∞ in pans; sepals glab on outer surface (ours), margins densely hairy; dry to damp basalt cliffs, talus, ditches, thickets; Eurasian intro; sw BC, otherwise Yakima Co, WA, CR in e OR, Custer Co and SR in ID; also other RMS and Ont; oriental v. (*C. aurea*, *C. o.* var. *robusta*) **2 C. orientalis** L.
- 3b** Sepals white to greenish-white, 6–15 mm, unawned; stigmas white to greenish-white, pink or red; fls erect, 3–∞ in pans; sepals moderately to densely hairy on outer surface and margins
- 4a** Pls ♀-fld with 40–70 stamens; fresh stigmas white to greenish-white; anthers glab; lvs once-pinnate, lflets (3–)5, entire to coarsely toothed, occ shallowly lobed, ovate (lanceolate); thickets, riparian areas, roadsides, disturbed areas, for edge; high-climbing European intro; w Cas, sw BC to OR, rarely e Cas; travelers-joy **3 C. vitalba** L.
- 4b** Pls ♂, ♀; ♀ fls with 6–20 sterile stamens; ♂ fls with 30–50 stamens; fresh stigmas red to pink or white; anthers glab to sparsely hairy; lvs 1(–2)-pinnate, lflets (3–)5–7(–15), gen coarsely toothed to 3-lobed, lanceolate to ovate; riparian thickets, roadsides, rocky slopes, sagebr des to ponderosa pine for; s BC to Mex, mostly e Cas in WA, but in CRG and both sides of Cas in OR, e to RMS and n Gr Pl; w c. or v. (*C. l.* var. *l.*) **4 C. ligusticifolia** Nutt.

**1b** Larger lvs ternately compound; lflets simple, lobed, or ternately divided

**5a** Lvs once ternate, lflets entire to sharply toothed or occ some very deeply lobed; open slopes, talus, ridges, thickets, open or dense for, foothills to subalp; Yukon s, e Cas, to UT, e to n Gr Pl, GL, and ne N Am; Columbia or rock c., Columbia v.; 2 vars. in our area

5 **C. occidentalis** (Hornem.) DC.

**a1** Lflets entire to shallowly toothed (rarely lobed); sepals blue to bluish-purple (reddish-purple, pink, white); pls gen climbing or trailing, 0.25–2.5 m; range of sp. including Okanogan Co, WA, but not Wen Mts (*C. columbiana* var. *c.* misapplied)

var. **grosseserrata** (Rydb.) J.S. Pringle

**a2** Lflets, at least some, deeply toothed to lobed; sepals pink to reddish-purple or bluish-purple; pls tufted or creeping, gen < 0.5 m; Okanogan Co, WA to Wen Mts. (*C. columbiana* var. *d.*)

var. **dissecta** (C.L. Hitchc.) J.S. Pringle

**5b** Lvs consistently 2–3 × ternate; sepals blue to purple, pink or white; often over calcareous soil; mostly e of Cont Div in our area, n MT to AZ and NM, e to n Gr Pl and TX; 2 vars.

6 **C. columbiana** (Nutt.) Torr. & A. Gray

**a1** Lvs ± biternate, segms mostly > 5 mm wide; pls viny, 0.5–2 m; open woodl, thickets, mont; c and sc MT and se ID, s to AZ and TX; climbing purple v., RM c. (*C. pseudoalpina*)

var. **columbiana**

**a2** Lvs ± triternate, segms mostly 1.5–5 mm wide; pls tufted, not viny, gen < 0.1 m; cliffs, ridges, and rocky areas in open woodl, mont to alp; n MT to UT, e to n Gr Pl and CO; matted purple v. (*C. t.*, *C. pseudoalpina* var. *t.*)

var. **tenuiloba** (A. Gray) J.S. Pringle

